

AMENDMENTS TO THE CLAIMS

Claim 1-32 (cancelled).

33 (Currently Amended): An asphalt surface repair apparatus comprising:

a single vehicle road repair system having a front and a rear portion, that includes on the vehicle:

a heating gas source;

at least one heater ~~carried by~~ mounted to the vehicle ~~such that the~~
~~at least one heater being movable to a lowered horizontally disposed position~~
~~that is substantially approximate to a surface to be repaired for pivotal articulation~~
~~relative to an adjoining structure of the vehicle for moving the at least one heater~~
~~towards and away from a surface to be repaired;~~

a hot new asphalt source;

~~a rejuvenating liquid source located forward of the at least one~~
heater;

a rejuvenating liquid dispenser; and

a sensor for sensing the distance between the at least one heater
and the surface to be repaired so that the heating can be controlled by the
proximity to the surface to be repaired.

wherein the at least one heater is capable of heating to a temperature
upon being turned on in less than about five seconds, cooling to an ambient
temperature upon being turned off in less than about five seconds, or a
combination of both.

34 (Currently Amended): The apparatus of claim 33, wherein the at least one heater is mounted to the rear portion of the vehicle for pivotal articulation relative to an adjoining structure of the vehicle for moving the at least one heater towards and away from the surface to be repaired.

35 (Currently Amended): The apparatus of claim 33, wherein the at least one heater includes a heater blanket.

36 (Previously Presented): The apparatus of claim 35, wherein the heater blanket is made of an electrical resistance steel that includes chromium and aluminum.

37 (Canceled):

38 (Canceled):

39 (Canceled):

40 (Currently Amended): The apparatus of claim 33, further comprising:

a controller for controlling an on/off operation of the at least one heater;
and

~~a sensor for sensing the position of the at least one heater with respect to the surface to be repaired;~~

wherein the controller turns on the at least one heater when the sensor senses the at least one heater is ~~generally~~ approximate to the surface to be repaired; and

wherein the controller turns off the at least one heater when the sensor senses the at least one heater is not ~~generally~~ approximate to the surface to be repaired.

41 (Currently Amended): The apparatus of claim 33, further comprising a storage compartment for storing tools and equipment, a compaction roller, or both.

42 (Currently Amended): An asphalt surface repair apparatus comprising:

a single vehicle road repair system having a front and a rear portion, that includes on the vehicle:

a heating gas source;

at least one infrared heater carried by the vehicle such that the ~~at least one infrared heater being movable to a lowered horizontally disposed position that is substantially approximate to a surface to be repaired mounted to the vehicle for pivotal articulation relative to an adjoining structure of the vehicle for moving the at least one heater towards and away from a surface to be repaired, wherein the at least one~~ infrared heater includes a heating blanket;

a hot new asphalt source;

a rejuvenating liquid source ~~located forward of the at least one~~ heater; and

a lance and reel ~~located forward of the at least one heater~~ for dispensing the rejuvenating liquid

wherein the at least one infrared heater is configured to heat the surface to be repaired having a depth less than about 100mm, and

wherein the at least one heater is capable of heating to a temperature upon being turned on in less than about five seconds, cooling to an ambient temperature upon being turned off in less than about five seconds, or a combination of both.

43 (Currently Amended): The apparatus of claim 42, wherein the at least one infrared heater is mounted to the rear portion of the vehicle for pivotal articulation relative to an adjoining structure of the vehicle for moving the at least one heater towards and away from the surface to be repaired.

44 (Previously Presented): The apparatus of claim 42, wherein the heater blanket is made of an electrical resistance steel that includes chromium and aluminum.

45 (Currently Amended): The apparatus of claim 42, further comprising:

a controller for controlling an on/off operation of the at least one infrared heater; and

a sensor for sensing the position of the at least one infrared heater with respect to the surface to be repaired;

wherein the controller turns on the at least one infrared heater when the sensor senses the at least one infrared heater is generally approximate to the surface to be repaired; and

wherein the controller turns off the at least one infrared heater when the sensor senses the at least one infrared heater is not generally approximate to the surface to be repaired.

46 (Currently Amended): The apparatus of claim 42, further comprising a ~~tow bar for towing a trailer-mounted~~ compaction roller.

47 (Currently Amended): An asphalt surface repair apparatus comprising:

a single vehicle road repair system having a front and a rear portion, that includes on the vehicle:

a plurality of infrared heaters ~~mounted to~~ carried on the rear of the vehicle such that the plurality of infrared heaters are movable for pivoting from a raised horizontally disposed position to a lowered horizontally disposed position that is substantially approximate to a surface to be repaired, and are capable of heating to a temperature upon being turned on in less than about five seconds, cooling to an ambient temperature upon being turned off in less than about five seconds, or a combination of both;

a heating gas source disposed ~~forward of the heaters;~~

a hot new asphalt source;

a rejuvenating liquid source located forward of the heaters; and

a lance and reel located ~~forward of the heaters~~ for dispensing the rejuvenating liquid;

~~a storage compartment; and~~

~~a built-in tank~~

wherein the plurality of infrared heaters include a heating blanket made of an electrical resistance steel that includes chromium and aluminum, a sensor for sensing the distance between the plurality of heaters and the surface to be repaired so that the heating can be controlled by the proximity of the

plurality of heaters to the surface to be repaired, and a control system located thereon for independent turning on and turning off of the plurality of heaters.

48 (Previously Presented): The apparatus of claim 47, wherein the heating gas source is a single source of infrared heat.

49 (Canceled):

50 (Canceled):

51 (Canceled):

52 (Currently Amended): The apparatus of claim 47, further comprising:
a controller for controlling an on/off operation of the ~~at least one~~ plurality of infrared heaters;

a ~~sensor for sensing the position of the at least one heater with respect to the surface to be repaired~~;

wherein the controller turns on the ~~at least one~~ plurality of infrared heaters when the sensor senses the ~~at least one heater~~ plurality of infrared heaters is generally approximate to the surface to be repaired; and

wherein the controller turns off the ~~at least one~~ plurality of infrared heaters when the sensor senses the ~~at least one~~ plurality of infrared heaters is not generally approximate to the surface to be repaired.

53 (New): The apparatus of claim 33, wherein the at least one heater includes a control system located thereon for independent turning on and turning off of the at least one heater.

54 (New): The apparatus of claim 33, wherein the at least one heater is configured to heat the surface to be repaired having a depth less than about 100mm.

55 (New): The apparatus of claim 33, wherein the at least one heater is configured to heat the surface to be repaired having a depth less than about 100mm, to heat the surface to be repaired to a temperature less than about 200°C, or both.

56 (New): The apparatus of claim 42, further comprising a sensor for sensing the distance between the at least one heater and the surface to be repaired so that the heating can be controlled by the proximity of the at least one heater to the surface to be repaired.

57 (New): The apparatus of 42, wherein the at least one infrared heater includes a control system located thereon for independent turning on and turning off of the at least one infrared heater.

58 (New): The apparatus of claim 47, wherein the at least one infrared heater is mounted to the rear portion of the vehicle for pivotal articulation relative to an adjoining structure of the vehicle for moving the at least one heater towards and away from the surface to be repaired, includes a storage compartment, a built in tank, and a compaction roller, or a combination of both.